RMRS
Rocky Mountain
Remediation Services, L.L.C.
. . . protecting the environment
Rocky Flats Environmental Technology Site
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Golden, Colorado 80402-0464
Phone: (303) 966-7000

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DOE ORDER #5480.21
99-RF-03072

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Crawford, A. C.	X	
Hamrick, J. C.	X	
Hickman, M. E.	X	X
Crowe, S.		
Guthrie, C. L.		
Korenko, M. K.		
Dieter, T. J.	X	X
Jenkins, Ken		
Miller, J.		
Cronin, R. D.		
Hughes, F.	X	
Trice, K.	X	
Wolf, K. Z.		
Zbryk, K. O.	X	X
Whiting, J.		
Bracken, G.		
Walker-Lembke		
Schommer, R.	X	X
Bourgeois, T	X	X
Amundson, R	X	X
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Voelz, B.		
Schweinsberg	X	X
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AUTHORIZED CLA
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Date:

IN REPLY TO RFP

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LTR APPROVALS:
Manager

G. & TYPIST INITI
ras

RF-46469(Rev.6/94)

August 4, 1999

99-RF-03072

John W. Whiting
779 Cluster PBS Manager
Kaiser-Hill
Rocky Flats Environmental Technology Site

REQUEST FOR MAJOR MODIFICATION OF THE DECOMMISSIONING OPERATIONS PLAN (DOP) FOR THE 779 CLUSTER INTERIM MEASURE/INTERIM REMEDIAL ACTION - MEH-074-99

The purpose of this memorandum is to request notification to DOE and CDPHE of major modifications to the 779 Cluster DOP. This modification is as follows:

The final 779 Demolition Plan is hereby submitted to be included into the 779 DOP as Addendum I. The Table of Contents for the DOP has been revised to reflect the Addendum and is included.

Please contact myself or Kathy Zbryk at X6647 if you have any questions.

Mark E. Hickman
Integration Manager
779 Cluster Closure Project
Rocky Mountain Remediation Services

ras

Attachments:
Page Change Summary
Revised Table of Contents
Addendum I, 779 Demolition Plan

1/26

ADMIN RECCRD

IA-B779-A-00097

STATE OF COLORADO

Bill Owens, Governor
Jane E. Norton, Acting Executive Director
Dedicated to protecting and improving the health and environment of the people of Colorado
HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION
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Colorado Department
of Public Health
and Environment

July 27, 1999

Post-it® Fax Note 7671	Date 8/5/99	# of pages ▶ 1
To Ruth Schommer	From JOHN WHITING	
Co./Dept. RMRS	Co. K-H	
Phone # 9067	Phone # 7512	
Fax # 2864	Fax # 3090	

Mr. Joe Legare
DOE RFCA Coordinator
US Department of Energy
Rocky Flats Field Office
10808 Highway 93, Unit A
Golden, CO 80403-8200

B779 Demolition Plan Approval

Dear Mr. Legare:

The State has received and reviewed the "Modification to the 779 Cluster Decommissioning Operations Plan for Demolition of the 779 Cluster". The modification has gone through a public comment period as required by the original Decommissioning Operations Plan.

Our review indicates that the plan is acceptable and this letter constitutes approval to commence work as described within the modification.

We look forward to working with Building 779 staff in oversight of the demolition process for the first plutonium building in the DOE complex.

Sincerely,

Steven H. Gunderson
CDPHE RFCA Coordinator

Edd Kray
CDPHE 779 Project Coordinator

cc: John Whiting, KH
Dave Nickless, RFFO
Ken Korkia, RFCAB
Dave Shelton, KH

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PAGE CHANGE SUMMARY

PAGE CHANGE	LETTER LOG NO	DATE	SUPERSEDES
PGC-001	MEH-023-98	May 12, 1998	Superseded by 002
PGC-002	MEH-080-98	December 7, 1998	
PGC-003	MEH-080-98	December 7, 1998	
PGC-004	MEH-051-99	May 24, 1999	
PGC-005	MEH-074-99	August 4, 1999	

DECOMMISSIONING OPERATIONS PLAN

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ADDENDUM

Denver West Remediation
and Construction, L.L.C.
. . . restoring the environment

ROCKY FLATS
ENVIRONMENTAL TECHNOLOGY SITE
(RFETS)

MODIFICATION TO THE 779 CLUSTER DECOMMISSIONING OPERATIONS PLAN

FOR DEMOLITION OF
THE 779 CLUSTER

July 1999

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Table of Contents

1. PURPOSE

The purpose of this document is to describe the activities necessary to safely demolish Building 779, 782 and the associated out buildings in the 779 Cluster. This document will be submitted as a modification to the 779 Cluster Decommissioning Operations Plan (DOP).

2. THE 779 CLUSTER DESCRIPTION

The following subsections describe a brief background for each building located in the 779 Cluster as shown in Appendix 1.

2.1 Building 779

Building 779 consists of the original two-story building and two additions. The original building was built in 1965, Annex 779-A was constructed in 1968, and Annex 779-B was constructed in 1973.

The facility is roughly an L-shape. The north-south leg is 161 ft. wide and 214 ft. long. The east-west leg is 62 ft. wide and 101 ft. long. At its highest point, the building is 27 feet high.

Three types of structural framing members are used in Building 779. Vertical concrete columns, cast-in-place and reinforced, 10 inches by 14 to 16 inches rectangular, rest on slab footings. Structural steel columns, 8 inches deep, wide flange I-beams encased in concrete, support an exterior passageway and an exterior wall of the original building. Concrete block pilasters, 16 inches by 16 inches, reinforced with steel, are used in the single-story portion of the original building.

Exterior walls of Building 779 are hollow concrete block except for the 12 inch thick, poured - in-place reinforced wall of the storage vault and the metal stud and siding on a storage area on the east side of the first addition. Concrete block walls are 10 inches to 12 inches thick for the first floor and 8 inches thick for the second floor. There is horizontal trussed wire reinforcement in both the exterior and interior hollow core concrete block walls. There is no vertical reinforcement in the concrete block walls. Walls are insulated with either perlite fill between cavities or 2 inch blanket insulation. Outer surfaces of the blocks are painted. Most of the interior walls in the building are painted concrete block. Storage vault walls, which are 12-inch thick, reinforced concrete, are also painted.

First floor slabs in Building 779 are poured-in-place, reinforced concrete 6 to 8 inches thick. The second floor slab in the original building is 3.5 inch thick reinforced concrete on concrete joists supported by concrete beams. The second floor slab of the second edition is 8 inch thick reinforced concrete on concrete joists supported by concrete beams.

Three different roof systems are used on Building 779. The single story portion of the original building is structural steel with 18 gauge steel decking, insulation and composite roofing. The two-story portion of the original building and the second addition is a poured-in-place, reinforced concrete slab on concrete joists, supported by concrete beams. The original building has insulation and composite roofing, whereas the second addition has 2 inches foamed-in-place urethane and silicone rubber roofing. The first addition roof consists of precast concrete tees with 2 inches of lightweight concrete, 4 inches of perlite and elasteromic roofing.

2.2 Building 782

Constructed in 1973, Building 782 served as a second filter plenum for Building 779. The building is 100 feet long, 61.75 feet wide and 15.75 feet high. Walls are 6-inch thick, precast, reinforced concrete panel keyed in place by 8-inch thick concrete columns that vary from 14 to 24 inches wide. There are no interior walls. The roof consists of precast, reinforced concrete twin tees with a minimum of 2 inches of composite cast-in-place, stone aggregate topping.

There is one large pit at the west side of the building that holds a fire water deluge tank and provides access through the duct tunnel to Building 779. The underground duct tunnel extends from the southeast corner of Building 779 to Building 782. The tunnel is 48 feet long, 10.75 feet wide and 12 feet high. The walls, roof and floor are 12-inch thick reinforced concrete. The top of the roof slab is approximately 3 feet below grade.

2.3 Building 727

Constructed in 1973, Building 727 is a one-story structure that is used to house an emergency diesel generator. The building is 24 feet long by 16 feet wide and 12 feet high. The walls are 8-inch thick concrete block. The roof is 5-inch thick reinforced concrete slab covered by asphalt-gravel roofing material.

2.4 Building 780, 780A, and 780B

Building 780 is a corrugated metal building that is 8 feet wide by 16 feet long and 10.25 feet high resting on a reinforced concrete slab. The roof is sheet metal.

Building 780A is a pre-manufactured corrugated metal building 8 feet wide by 12 feet long and 9 feet high. It has plywood flooring and rests on 4" x 4" wooden skids.

Building 780B is a corrugated metal building that is 10 feet wide by 11 feet long and has a sloped roof that is 9.25 feet at its highest point. It rests on the same concrete slab as Building 780.

2.5 Cooling Towers System (Buildings 783, 784, 785, 786, and 787)

The Cooling Tower System consists of Building 783 (pump house) and eleven modular cooling water recirculation units identified as 784A, 784B, 784C 784D, 785, 786A, 786B, 787A, 787B, 787C, and 787D.

Building 783 is constructed of aluminum and steel pedestals attached to a reinforced concrete slab foundation. It is 21 feet wide and 24.5 feet long. The sloped roof is approximately 15 feet high at its highest point. The walls and roof are aluminum panels attached to a channel iron and I-beam framework.

The cooling water towers range from 7.25 feet to 9.25 feet wide by 18 feet long by 16.25 high. They are constructed of aluminum and steel mounted on reinforced concrete pedestals on a reinforced concrete foundation. A catwalk system, constructed of grating, I-beams and ladders provides access to the towers.

3. PREREQUISITES TO BUILDING DEMOLITION

The condition of the 779 Cluster prior to demolition will be as follows:

- The buildings will be isolated from all Site utilities.
- The final closeout radiological survey of the 779 Cluster will be completed for each individual building or areas within the buildings and reviewed by DOE and the Lead Regulatory Authority (LRA) in accordance with the 779 Cluster DOP. The closeout radiological survey will demonstrate that the 779 Cluster structures and areas within the structures (interior and exterior) meet radiological release criteria. Any components or walls not releasable from a radiological standpoint will be removed and disposed of individually prior to the total demolition of the building. (Note: A reasonable attempt will be made to remove contamination from the floor slab of Building 779. If contamination remains, negotiations will ensue with RMRS, K-H, DOE and CDPHE to determine the final disposition of the slab.)

- The following systems will be removed from the buildings or areas within the buildings:
  - Zone I (Glovebox) ventilation, Zone II (Building) ventilation,
  - House vacuum,
  - Process piping,
  - Electrical distribution,
  - Alarm systems, Filter plenums,
  - Control room,
  - Emergency diesel and support systems, and
- Asbestos containing material will be removed from each facility.
- The buildings will be characterized and will not contain any hazardous substances. Analysis of the paint for RCRA metals will be performed using Toxicity Characteristic

Leaching Procedure (TCLP). No RCRA metals will be permitted above the Land Disposal Regulation (LDR) thresholds.

- All below grade openings will be plugged, capped, blind flanged or covered with an appropriate protective covering.

The scope of the demolition activities covers the disassembly of the 779 Cluster structures to the slabs, minimal segregation of building materials, as necessary, and relocation of materials for recycling, re-use or off-site disposal. Most of the bulk building structural material is expected to be released and will be removed from the Site for recycle and disposal, as appropriate. The materials will be managed as sanitary waste in accordance with the 779 DOP or per an approved Rocky Flats Cleanup Agreement Standard Operating Procedure (RSOP).

The LRA will be advised of the specific methods to be used and will be provided access to review work packages prior to demolition. Initiation of demolition operations is dependent upon successful completion of a Kaiser-Hill Management Review with CDPH&E (LRA) involvement.

The project will not disturb any soil around the building, except in an incidental manner, e.g., impressions from heavy material or equipment resting on and compressing the soil. Common types of mechanical demolition methods and equipment will be used. These methods are identified and described in Section 5, Demolition Techniques; however, the demolition will be performed and exact methods determined by an experienced and qualified demolition contractor.

Although the 779 Cluster will be demonstrated to meet radiological and non-radiological release criteria, air samples will be obtained to supplement the RFETS boundary monitoring system in accordance with the *Building 779 Cluster Demolition Project Air Monitoring Plan, March 1999* (Appendix 2). In addition, qualified radiation control technicians will be available to perform random checks of the demolition debris, as directed by the Project's Radiological Engineer.

After demolition is complete, only the concrete floor slab that has concrete curbs and equipment pedestals protruding above the slab will remain at the Building 779 site. The soil and below grade structures will be assessed as necessary for below-grade contamination at a later time.

4. BUILDING DEMOLITION APPROACH

A qualified and experienced demolition contractor shall perform the 779 Cluster demolition in accordance with industry practices and site requirements. A competent structural engineer and safety professional will continually monitor demolition activities to ensure that the demolition activities are conducted safely. Protection of the existing utilities and installation of safety nets will be accomplished at appropriate steps.

Building structural demolition may employ large mechanical equipment including a wrecking ball/crane, a tracked excavator equipped with a hydraulic hoe-ram and grapple, and front-end loaders to demolish, size reduce, segregate, and load the concrete, steel and other building materials into the structural waste containers. . A detailed description of various demolition technologies is provided in Section 5, any of which may be used in the appropriate situation. Cutting torches will be used to

remove rebar extending above the foundations and structural metals, as necessary, to support lading of rubble, attached to concrete. All torch cutting will be performed in accordance with the project specific Health and Safety Plan and Hot Work Permits. Structural steel will be segregated from the debris, as required, and placed into roll-offs using a grapple. Fugitive dust will be controlled as described in Section 7.1, Environmental Protection.

The primary demolition steps and mechanical techniques recommended for dismantling and segmenting the buildings are provided below. The demolition approach listed in the following sections may be modified based on the most current facility conditions and recommendations of the subcontractors' competent structural engineer.

4.1 Building 779

Demolition of Building 779 will begin in an area specified in the Integrated Work Control Package (IWCP). Waste containers will be staged as close to the demolition area as possible and will move in the direction of the demolition work. Hydraulic excavators with grapples, shears, breakers, pulverizers or other appropriate attachments, along with a crane and wrecking ball will be used to demolish the building.

The excavators will be used for general and more precise demolition. Demolition performed adjacent to streets, buildings and other structures will be conducted in a manner as to bring the Building 779 debris in upon itself and away from the surrounding areas of concern. Hydraulic breakers and the crane with the wrecking ball will be used to weaken (if needed) the thicker reinforced walls in order to pull Building 779 in upon itself or the building footprint. The wrecking ball will employ the vertical drop method in order to keep debris within the building footprint.

Prior to demolition of the overhead passage between Building 779 and Building 777, shoring will be placed under the walkway to temporarily support the structure. Scaffolding will be built to provide access to the sides of the bridge just east of the gas and steam lines. The walkway will then be cut free to provide a clean break when being removed.

Building demolition debris will be size reduced (weight and dimension) to fit into a roll-off container. Demolition debris will be loaded into the containers using excavators, loaders, all terrain hoists, etc.

4.2 Building 782

Demolition of Building 782 will begin in an area specified in the Integrated Work Control Package (IWCP). Hydraulic excavators with grapples, shears, breakers, pulverizers or other appropriate attachments, along with a crane and wrecking ball will be used to demolish the building.

The excavators will be used for general and more precise demolition. Demolition next to streets, buildings and other structures will be performed in a manner as to bring the Building

782 debris in upon itself and away from the surrounding areas of concern. Hydraulic breakers and the crane with the wrecking ball will be used to weaken (if needed) the thicker reinforced walls in order to pull Building 782 in upon itself or the building footprint. The wrecking ball will employ the vertical drop method in order to keep debris within the building footprint.

Building demolition debris will be size reduced (weight and dimension) to fit into a roll-off container. Demolition debris will be loaded into the containers using excavators, loaders, all terrain hoists, etc.

4.3 Building 727

The primary equipment to be used for this building will include an excavator with a hoe-ram or grapple and a front-end loader to load the debris. Demolition will be performed in the same manner as Building 782. Demolition materials will be staged in the northeast area of the 779 Cluster until loaded and transported off site.

4.4 Cooling Tower System (Buildings 783, 784, 785, 786, and 787)

Building 783 will be removed using an excavator with a grapple and a front-end loader to load the debris for transport off site. The individual cooling towers will be loaded on a flat bed trailer using a crane and released as equipment to Plant Maintenance for disposition. The remaining superstructure will size reduced and loaded for transport off site.

4.5 Waste Management

Approximately 159,000 cubic feet of structural debris will be generated during the demolition of the above structures. This will require approximately 300 20- cubic yard containers to transport the debris to the storage pile or repository. The buildings will be removed down to the foundations leaving the grade slab and equipment pedestals. All anchor bolts and/or other protrusions on the equipment pedestals will be removed within 1/16" of the surface. Pits, sumps, trenches or other openings in the grade slab will be plugged, capped or covered with a watertight cover capable of supporting foot traffic.

The waste generated from the demolition of the 779 Cluster will be managed and segregated in accordance with the 779 DOP and Project Waste Management Plan.

5. DEMOLITION TECHNIQUES

5.1 Excavator Mounted Attachments

Controlled demolition: refers to the use of various attachments mounted on an excavator to disassemble a structure. Basic attachments, which operate off a hydraulic system, include such items as concrete pulverizers, shears, grapples and rams. These attachments perform the following functions:

- Pulverizer: crushes concrete and separates rebar and encased steel beams;
- Shears: sever concrete, metals, structural steel, wood, rubber and plastic;
- Grapple: serves as an all-purpose tool for demolition and materials handling;
- Ram: demolish concrete structures(up to 6 feet thick) using a moil or chisel point

Excavator mounted attachments are recommended for a wide variety of demolition projects. Concrete pulverizer jaws are capable of separating rebar and embedded steel beams from concrete. Plate shears are available for clean cutting steel plate up to 1¼" thick. The plate shears are more applicable to decommissioning and can be used to dismantle above and below ground tanks and to cut separated rebar and concrete. Grapples are versatile and provide a wide range of uses, such as demolition, scrap recycling, and materials handling (e.g. loading rebar, crushed concrete). Grapples can be used as an alternative to loaders and buckets as tools for demolition cleanup.

The ram (both air-powered and hydraulic) is a resistance driven tool in that it begins operating as soon as the chisel point touches the workpiece and stops as soon as the chisel is lifted or clears the workpiece. Air powered rams can be used for lightly reinforced concrete that is less than 2 feet thick. Hydraulic rams can be used for demolition of much larger sections of concrete (up to 6 feet thick) and are available with heads capable of delivering 7,000 – 10,000 ft/lb of energy per blow.

5.2 Wrecking Ball

The wrecking ball is typically used for demolishing nonreinforced or lightly reinforced concrete structures less than 3 feet thick. The equipment consists of a 2-5 ton ball suspended from a crane boom. The preferred method of use is to raise the ball with a crane 10 – 20 feet above the structure and release the cable brake, allowing the ball to drop onto the target surface. This method achieves good fragmentation of the structure and maintains maximum control of the ball after impact.

5.3 Diamond Wire Cutting

Diamond wire cutting involves a series of guide pulleys that draws a loop of multi strand wire strung with a series of diamond beads and spacers through a cut. The length of wire that is required for a cut is obtained by assembling standard length sections of wire end-to-end using screwed sleeves. A contact tension is kept on the wire. This force, in combination with the spinning wire, cuts a path through concrete and rebar. Linear wire speed is adjustable for 0-5,900 ft/min, and wire tension can be adjusted from 1 to 330 lbs. The wire is wrapped around the object to be cut and tension is applied. If an internal cut is required (e.g. doorway), core drilling is necessary, and the wire is fed through the holes. Almost any thickness can be cut with this technique.

One of the major benefits of the wire saw is the flexibility of the pulley system, which allows it to cut unusual configurations. This flexibility also allows easy and safe cutting difficult access areas without moving obstructions. The wire saw also lends itself to remote cutting in

hazardous, radioactive or underwater environments. Water is used not only for cooling and lubricating purposes, but also for removing slurry from the kerf. This water can be treated and recycled, and the slurry, if contaminated, must be properly disposed of. Contaminated water will be collected and treated within the 779 Cluster, Building 891 or in Building 374 in accordance with the 779 DOP.

6. WORK CONTROL AND AUTHORIZATION

Work control and authorization will be managed using the organization identified in Section 2.0 of the 779 Decommissioning Operations Plan (DOP).

Demolition activities will comply with the 779 Cluster DOP and with RFETS site-specific procedures, such as Integrated Work Control Packages (IWCP). The RFETS Integrated Work Control Program (IWCP) incorporates the requirement to include Integrated Safety Management (ISM) principles in accomplishing demolition activities. The ISM principles ensure workers involvement in the planning, hazard identifications and implementation of the demolition activities. The IWCP review process evaluates the activity for worker safety, hazard identification, mitigation measures and compliance with the 779 Cluster authorization basis documents.

Any project personnel have the authority to stop work if an unsafe condition is observed. Restart authority for any work stoppage, for any reason, lies within the Project Work Authorization Team (WAT) Manager.

Security requirements for this project are identified in the Special Security Plan W 99-002, for the 779 Cluster, dated February 1, 1999. A security island has been established within the PA that allows free access to people within the 779 Cluster security island fence (Isolation Area). Escorts are required to transport uncleared personnel from Portal 1 to the Isolation Area around the 779 Cluster. Project activities involving movement of equipment and material into and out of the 779 Cluster will have appropriate security measures incorporated into their work plans.

7. ENVIRONMENTAL, HEALTH AND SAFETY CONTROLS

7.1 Environmental Protection

The Subcontractor will minimize environmental impacts resulting from demolition through the use of procedures designed to prevent uncontrolled releases of waste, control water run-on and run-off, and minimize fugitive dust emissions. All wastes generated during demolition will be characterized and packaged in compliance with project-specific ARARs (779 Cluster DOP Section 9.3), relevant RFETS Waste Management Procedures (RFETS procedures reflect applicable DOE and Colorado Hazardous Waste Act (CHWA) requirements), and applicable Waste Acceptance Criteria (WAC).

7.2 Air Emissions Control

Fugitive dust emissions will be controlled by using the following methodologies:

- Controlled water spray to minimize fugitive dust emissions during demolition.
- Building debris will be loaded into waste roll-off containers that will be covered to control fugitive dust emissions.
- Materials deposited on paved haul roads as a result of the demolition project will be removed if the spread of dust from these deposits creates a nuisance in the surrounding areas.
- Demolition activities will be terminated during periods of high winds.

The existing Site Radioactive Ambient Air Monitoring Program (RAAMP) sampler network will be used for ambient air monitoring during demolition. The RAAMP sampler network continuously monitors airborne dispersion of radioactive materials from the Site into the surrounding environment. The existing monitoring will be supplemented by more frequent sampling using five existing fixed samplers in the immediate vicinity of and surrounding the 779 Cluster.

The 779 Cluster Demolition Project Air Monitoring Plan identifies the enhanced monitoring samplers, defines the action levels, and lays out the filter collection and analysis protocol. A baseline analysis will be conducted prior to the commencement of demolition activities. The five samplers will be collected and analyzed weekly. The alpha/beta screening results from these samplers will be compared on a weekly basis to two pre-defined concentration levels: the 0.1 mrem, Level 1, and 5.0 mrem, Level 2, values. Level 1 data is used as an initial screen to ensure that radionuclide emissions from the project are not higher than expected while Level 2 data is used to ensure that the Site 10 mrem per year regulatory standard is not exceeded.

The 779 Cluster Demolition Project is not expected to warrant radionuclide air monitoring beyond the enhanced ambient air sampling described above. This determination will be based on The CloseOut Radiological Survey Plan for Building 779 Cluster. The Close-Out Radiological Survey Plan for Building 779 defines the methods used to verify that radioactive contamination in Building 779 meets unrestricted release criteria levels. If portions of Building 779 do not meet the unrestricted release criteria, the area will be decontaminated or removed in accordance with the DOP prior to demolition.

The use of water collection equipment is not expected to be necessary. Stormwater-related run-off will be controlled through the use of standard construction industry accepted Best Management Practices such as silt fencing, hay bales, pigs, etc.

Daily inspections of the demolition equipment will be performed to verify that equipment fluid leaks are detected as early as possible. This inspection practice will assure that there are no significant equipment fluid spills for the duration of the project.

Precautions will be taken to ensure compliance with the Migratory Bird Act, which prohibits destruction of birds or their nests, active or inactive without a permit. Building surveys for such nests in the 779 Cluster will be conducted prior to demolition.

7.3 Health and Safety

Health and Safety practices are identified in a project specific Heath and Safety Plans (HASP). The HASP defines mechanisms and procedures to identify, mitigate, and control/eliminate potential safety, health and environmental hazards associated with the demolition of the 779 Cluster. Activity Hazard Analyses (AHAs) or Job Hazard Analyses (JHAs) address specific hazards associated with the demolition activities. The HASP also identifies required training via a *'779 Cluster Demolition Project H&S Training Matrix.'* Individual workers must comply with the training requirements listed on the matrix for specific activities, including demolition.

No tasks (excluding walkdowns, general work tasks, surveillance, inspections, and other tasks specified by the Project Health and Safety Manager) will be performed until an AHA/JHA has been written and approved. The AHA/JHA is task specific and addresses the hazards for each task step, controls to be used, special equipment needs, training, and any necessary monitoring.

The Project Health and Safety Manager, together with radiological personnel will assess the need for employee personnel and area monitoring. Such monitoring may include noise, heat stress, chemical, and radiological hazards. Health and Safety personnel will assist in the full time management of demolition hazards.

Known Hazards: Anticipated hazards associated with this project are physical hazards (e.g., noise, muscles strains, cuts/abrasions, electrical shock, slips/trips, use of heavy equipment, dropped loads, and falls from elevated surfaces). These anticipated hazards are associated working with portable hand tools, working at heights, and using heavy machinery. The HASP and associated AHA/JHAs address methods to control these hazards.

Lead paint has been used on the interior surfaces of Building 779. Analysis of the paint for RCRA metals was performed using TCLP and documented in the Metals in Paint Characterization Report, Building 779 Cluster, August 6, 1998. No RCRA metals were detected above the LDR thresholds. During demolition, these painted surfaces are kept wet to prevent fugitive dust releases and precautions are taken to control and contain the run-off of excess water through the use of earthen dams and hay bales.

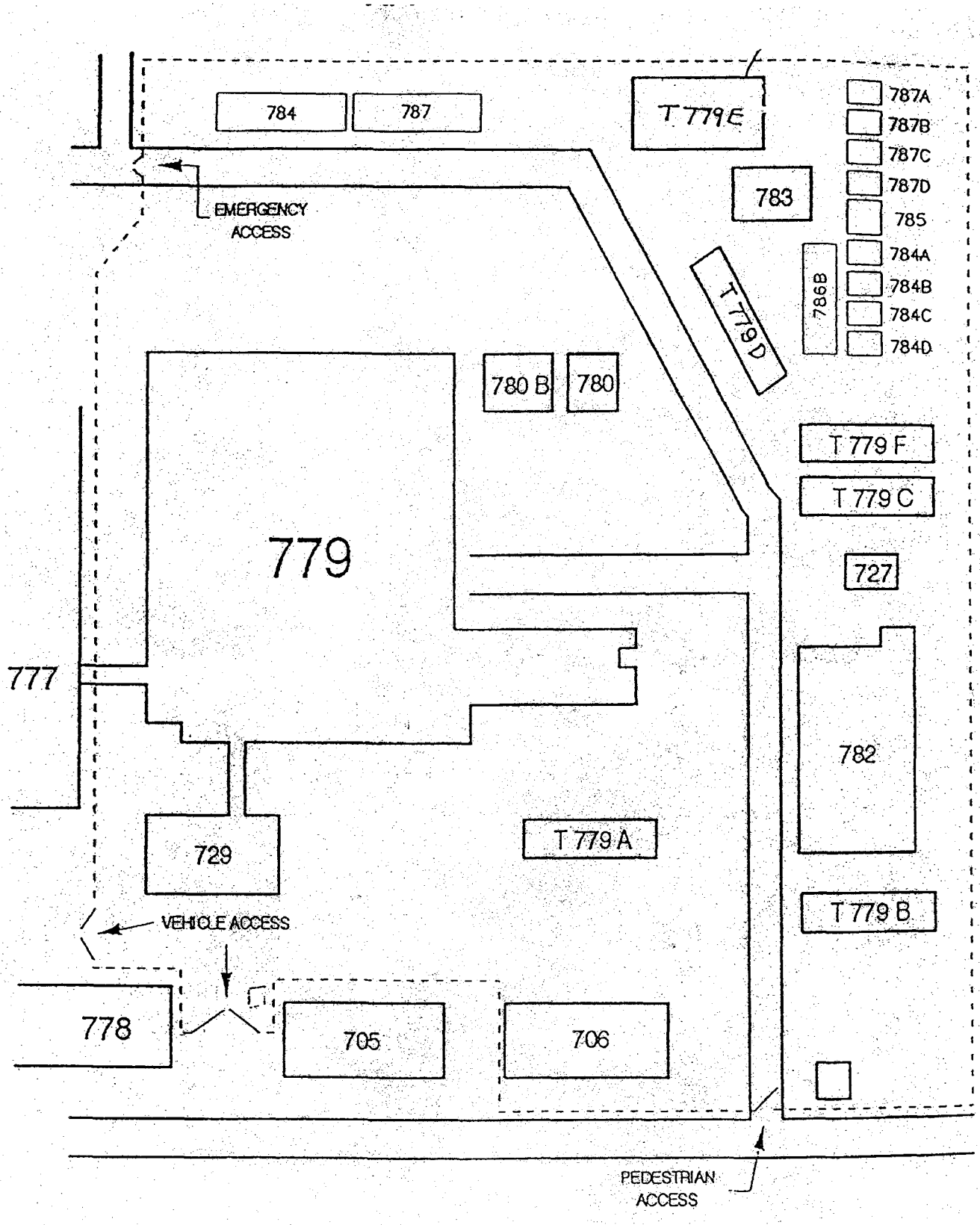
Work activities will be stopped if any unanticipated hazard is discovered or a known or potential hazard is present at a level exceeding established control limits. Appropriate notifications and mitigation of the hazard encountered will be pursued.

The requirements for the following plans have been incorporated into the HASP or will be issued as separate documents.

- Lead Compliance Plan
- Fall Protection Plan
- SHP
- Critical Lift Plan
- Preliminary Hazard Analysis

7.4 Completion Report

At the end of the 779 Cluster Demolition Project, a Project Completion Report will be prepared. This report will include a listing of wastes removed from the 779 Cluster and characterization data that contributed to the final forms and volumes of wastes generated during demolition of the building.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